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ALCATEL

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FEB 26 2001

James J. Gunther, Jr.  
Senior Manager, Regulatory Affairs  
(202) 715-3709

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

February 23, 2001

ORIGINAL

EX PARTE OR LATE FILED

Margalie R. Salas  
Secretary  
Federal Communications Commission  
445 12th Street, S.W., TW-A235  
Washington, D.C. 20554

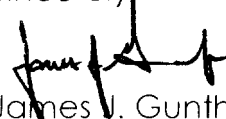
Re: Deployment of Wireline Services Offering Advanced Telecommunications  
Capability, CC Docket No. 98-147  
Implementation of the Local Competition Provisions of the  
Telecommunications Act of 1996, CC Docket No. 96-98 /  
Notice of Ex Parte Meeting

Dear Ms. Salas:

Please be advised that on February 22, 2001, I, along with Darrell Mansur and Jerry Jackson of Alcatel USA met with the FCC employees set forth in the attached list to discuss issues related to the above referenced matter. In the course of the discussion, Alcatel USA described the elements of the remote terminal network architecture, including line card functionality, network bandwidth constraints and the difficulties of multi-carrier provisioning of services. In addition, Alcatel USA discussed the ongoing collaborative meetings between ILECs & CLECs, as prescribed in the SBC Project Pronto Waiver Order. The attached presentation was used in the course of these discussions.

If you have any questions concerning this contact, please do not hesitate to call me at the above referenced number.

Sincerely,

  
James J. Gunther, Jr.

Attachment

cc Johanna Mikes, CCB (w/o attachment)  
Staci Pies, CCB (w/o attachment)

No. of Copies rec'd 2  
List A B C D E

## February 22, 2001

[illegible]

# **Litespan<sup>®</sup>-2000 & 2012 ADSL**

**SBC Industry Collaborative Meeting**

**Dallas, Texas**

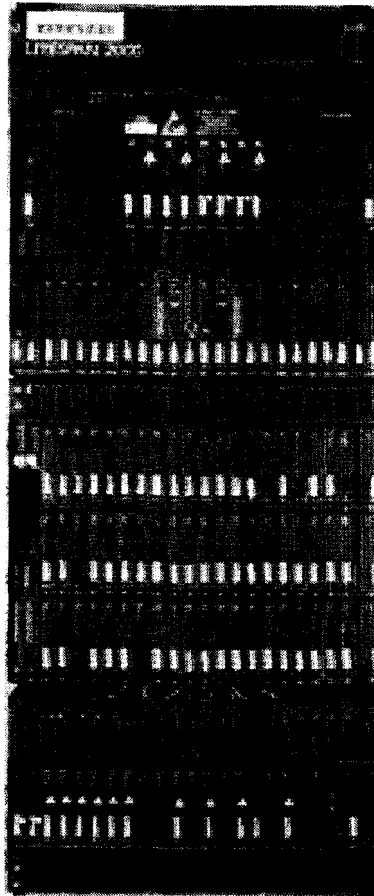
**January 25, 2001**

**Darryl Besemer**

**Alcatel USA**



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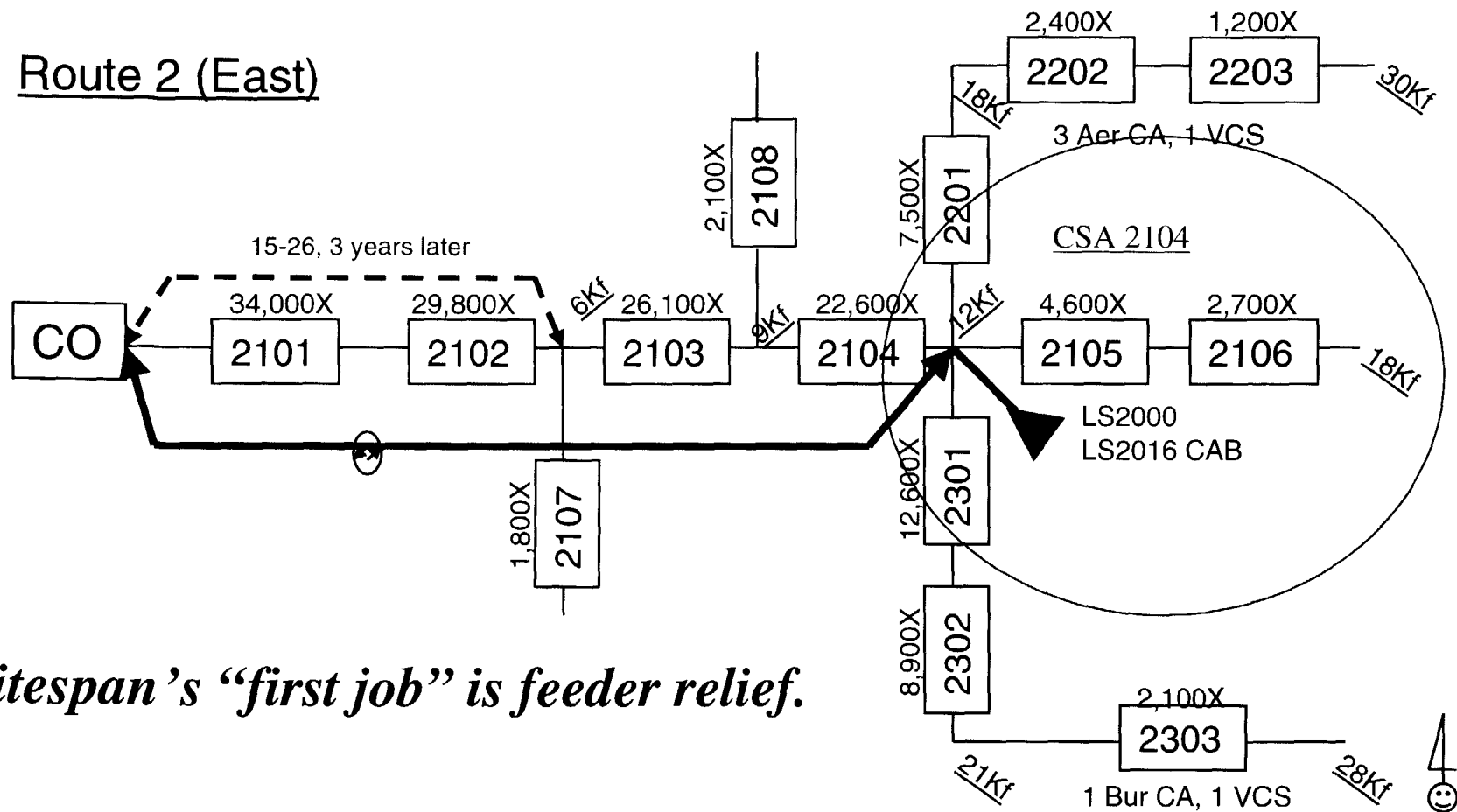


## ▼Market leader:

- ◆ Industry's first optical NGDLC, first GR303, and first integrated NGDLC with ATM-DSL
- ◆ Footprint in every major Telco in the US
  - ▶ 43 million lines of RT capacity EOY 2000
- ◆ Supports multi-protocol with TDM and ATM on a single platform

# DLC Relief With Litespan

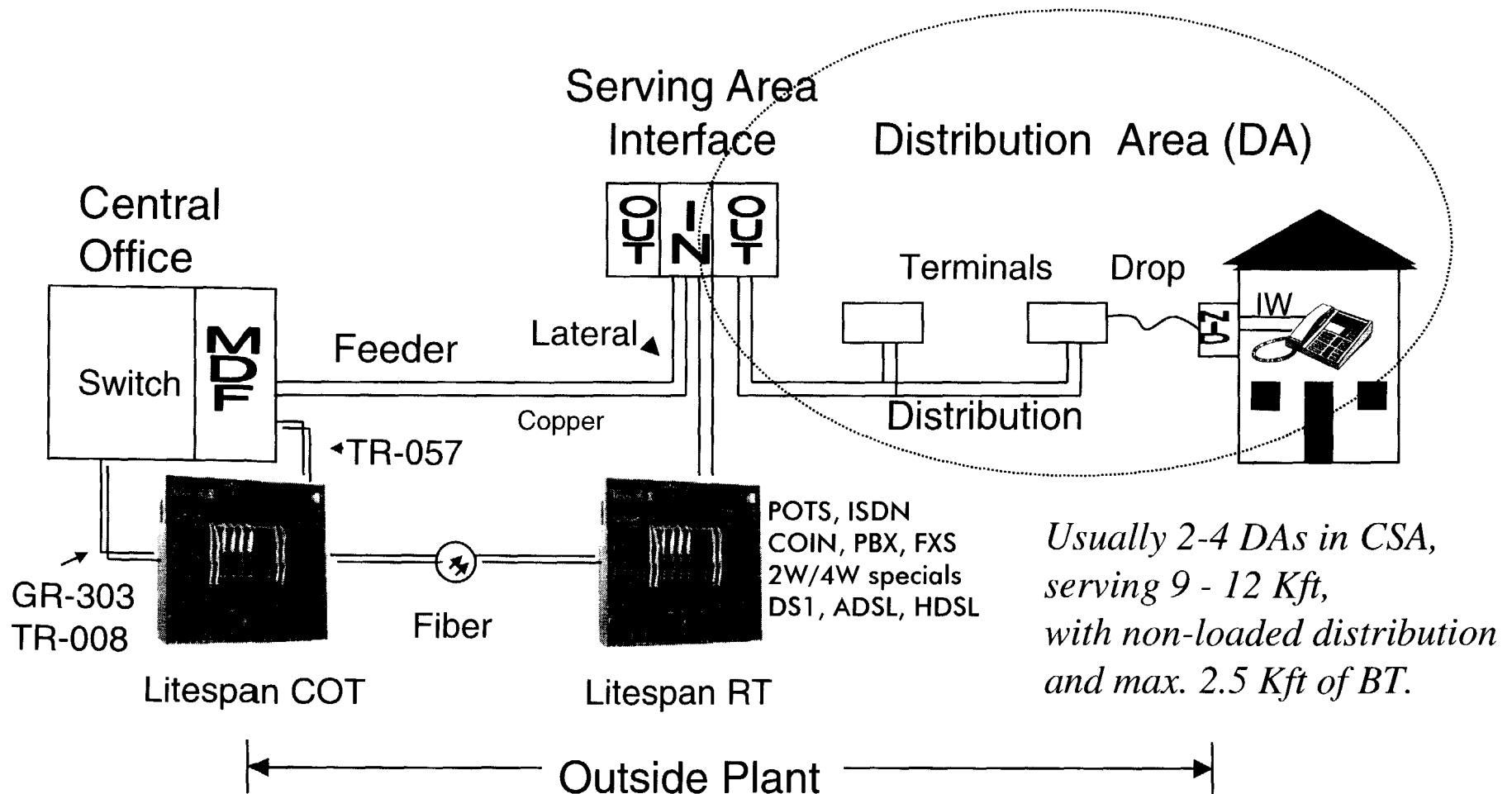
## Route 2 (East)



*Litespan's "first job" is feeder relief.*

# Litespan Environment -- CSA

*Litespan is optimized for Carrier Serving Area applications.*



## To Add ADSL Service - Requires Minimum Software Release 10.0

---

### ▼LS-2000

- ◆ Replace BCUs with ABCUs (2)
- ◆ Add ADLUs
- ◆ In Service
- ◆ Transport by:
  - ▶ Separate Fiber
  - ▶ LS 2012 Subtending
  - ▶ WDM (not deployed/tested in SBC territory\*)

### ▼LS-2012

- ◆ Replace BCUs with ABCUs (2)
- ◆ Add ADLUs
- ◆ In Service
- ◆ Transport by:
  - ▶ Separate Fiber
  - ▶ OC-3c broadband drop
  - ▶ WDM (not deployed/tested in SBC territory\*)

- 
- \* WDM offered for applications with no spare fiber. Limitations include:
- Additional equipment, costs, and replacement of COT & RT Optics
  - Important testing capabilities are eliminated
  - Maximum 2 wavelength solution for proprietary, integrated optics
  - Have to move existing TDM traffic to new wavelength (in service cut)

## **Litespan<sup>®</sup> Release 10 DMT Features**

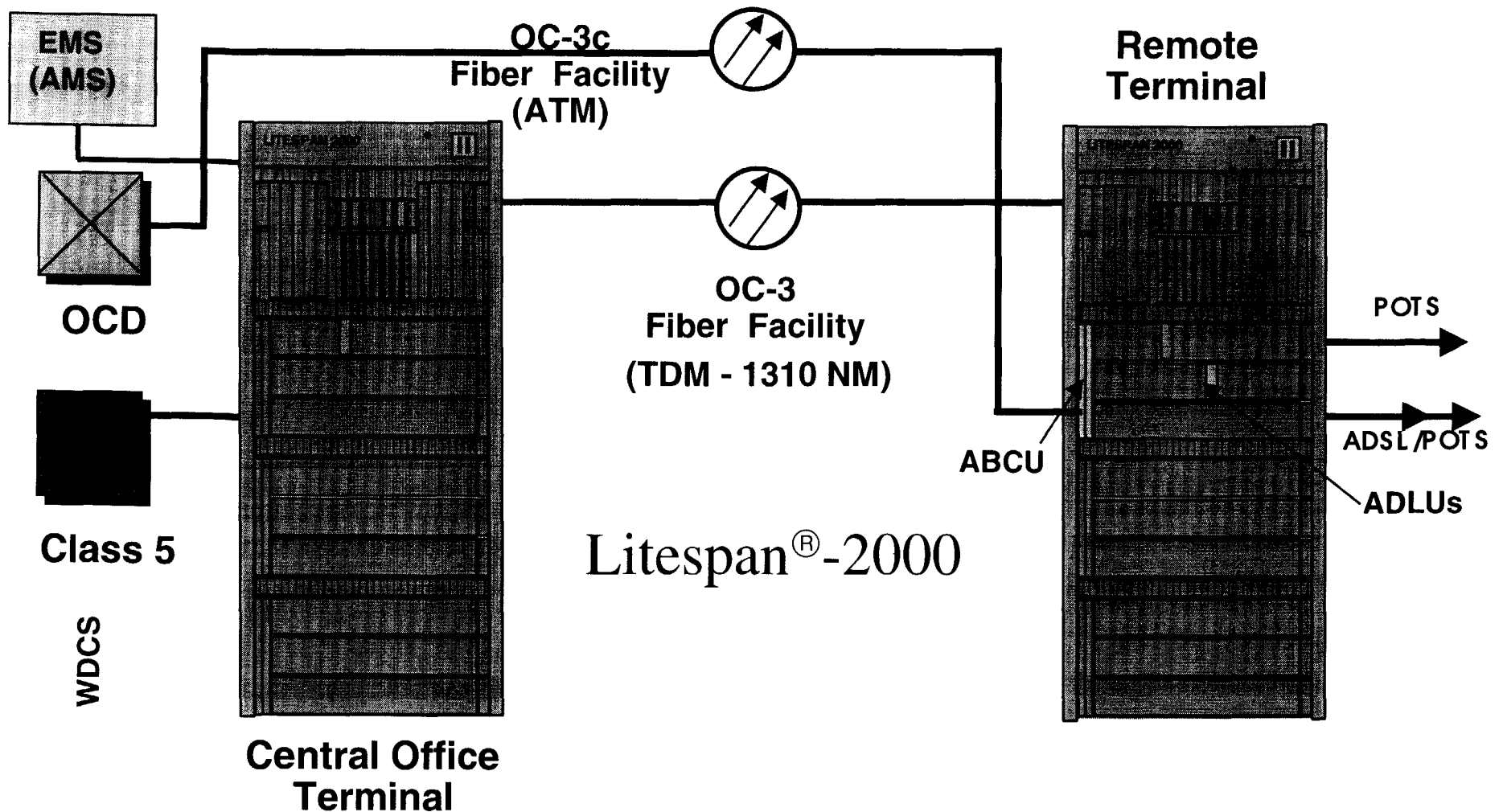
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### **(existing)**

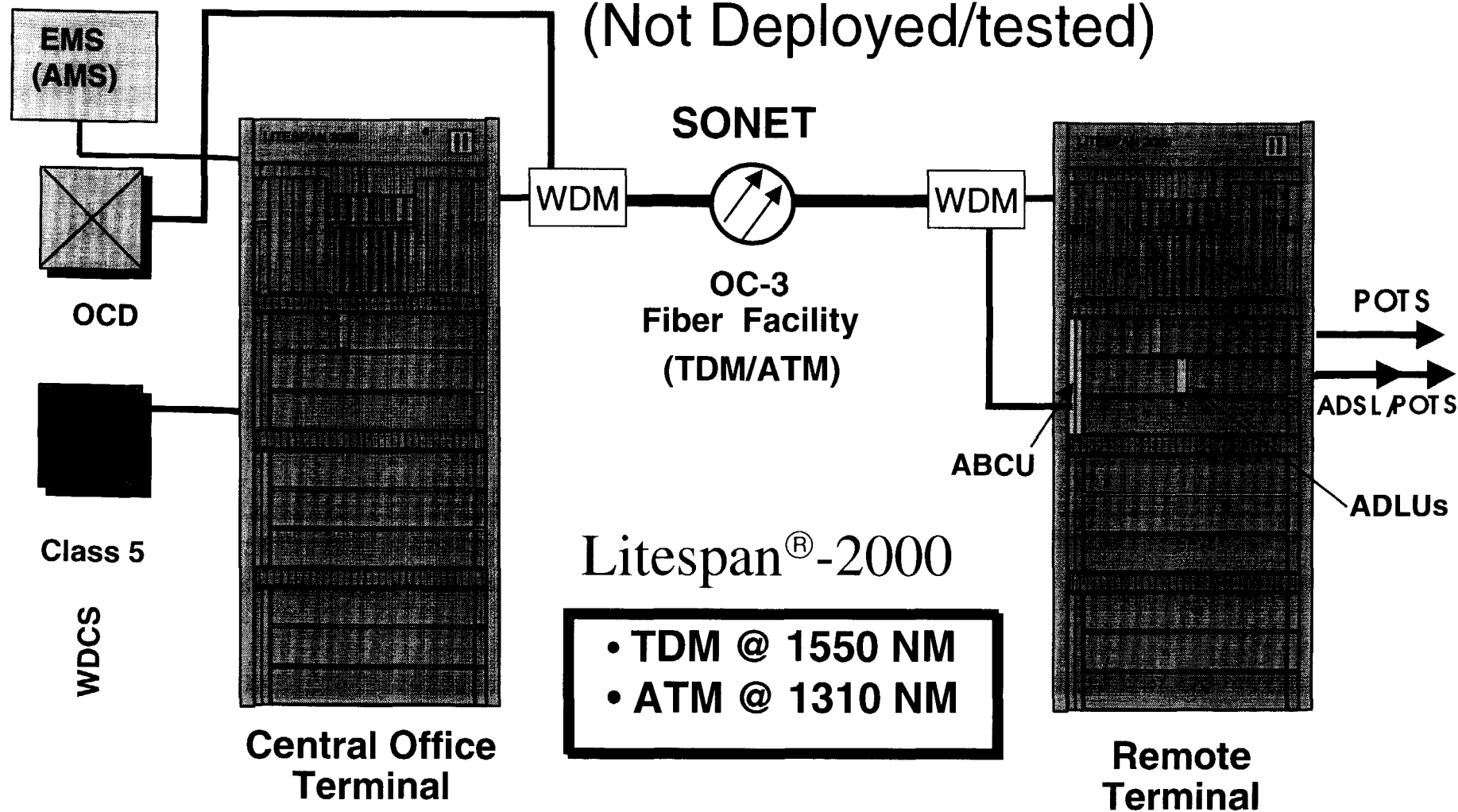
- ▼ **DMT “combo” line card**
  - ◆ 2 subscriber lines per card
  - ◆ Integrated POTS and splitter
- ▼ **224 VCs per CBA; one VP per CBA; up to 32 CBAs per chain**
- ▼ **Up to 2 PVCs per drop (tested)**
  - ◆ 1,024 per OC-3c chain
- ▼ **Two classes of service - UBR and CBR**
- ▼ **Line rates set in 32 Kbps increments**
- ▼ **Test access (mechanized loop testing support)**
- ▼ **AMS 3x**
- ▼ **Approximately 1/3 shelves can be upgraded**
  - ◆ Power and thermal dissipation restrictions

# Litespan<sup>®</sup>-2000 - POTS + ADSL Service

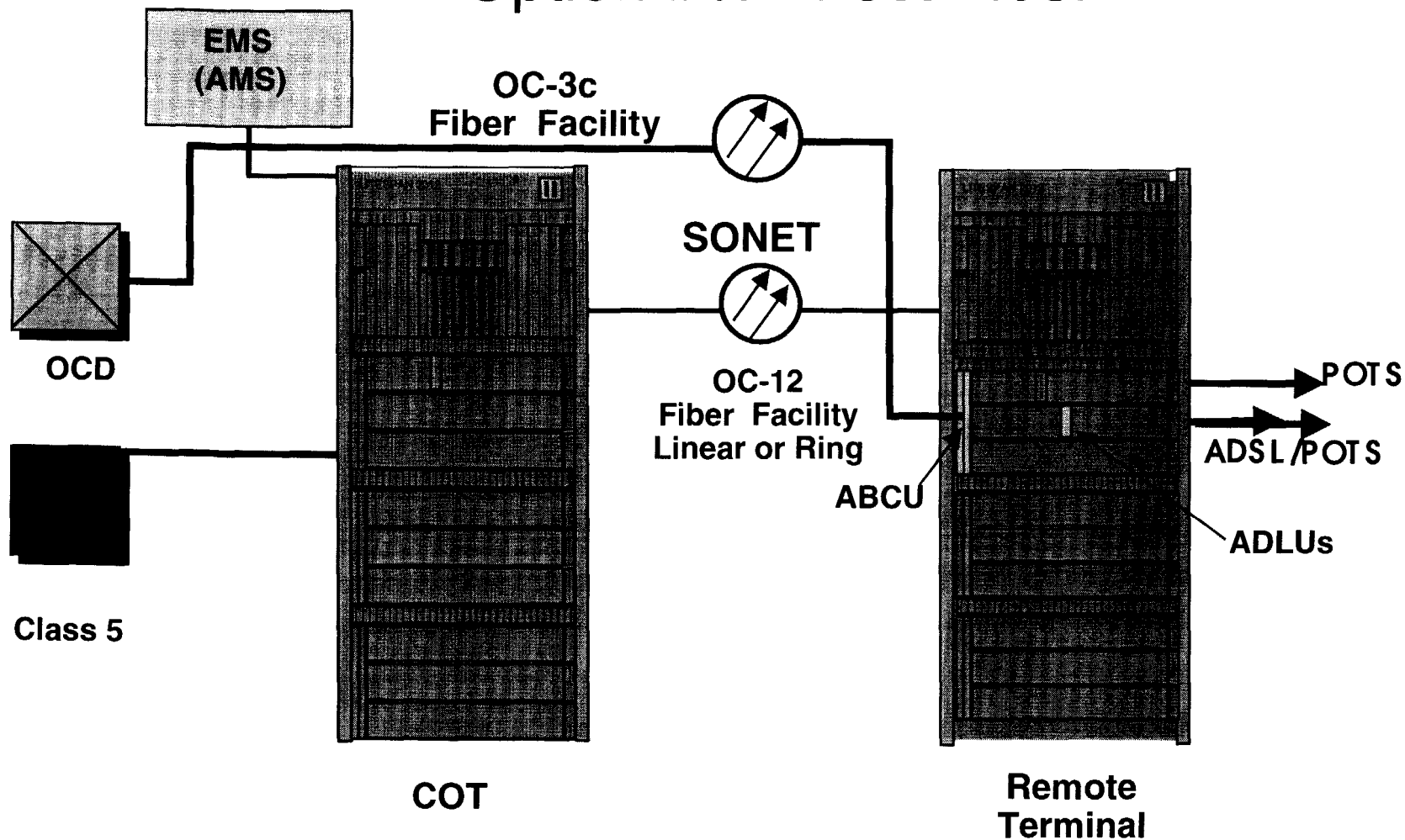
## Option #1: Direct Fiber



## Option #2: WDM (Not Deployed/tested)

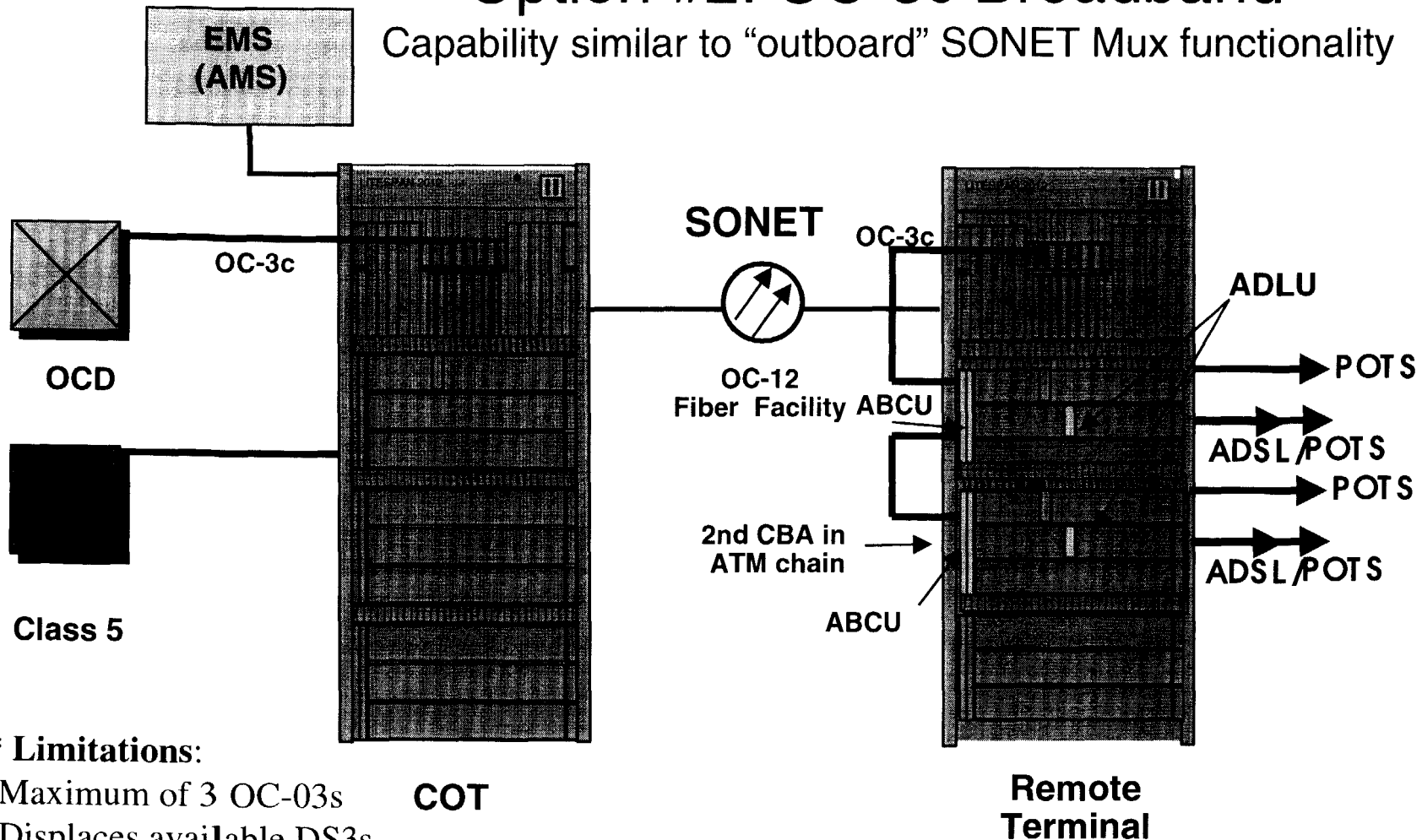


## Option #1: Direct Fiber



## Option #2: OC-3c Broadband\*

Capability similar to “outboard” SONET Mux functionality

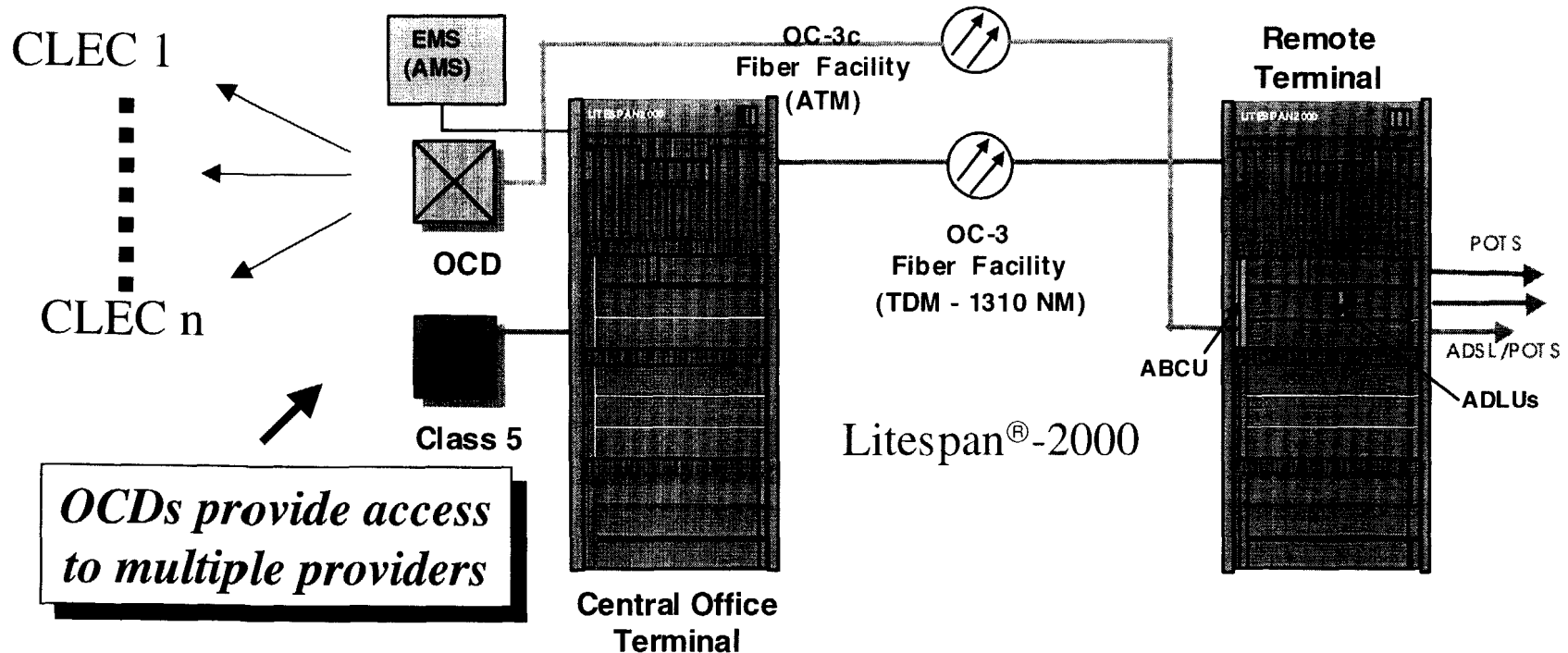


### \* Limitations:

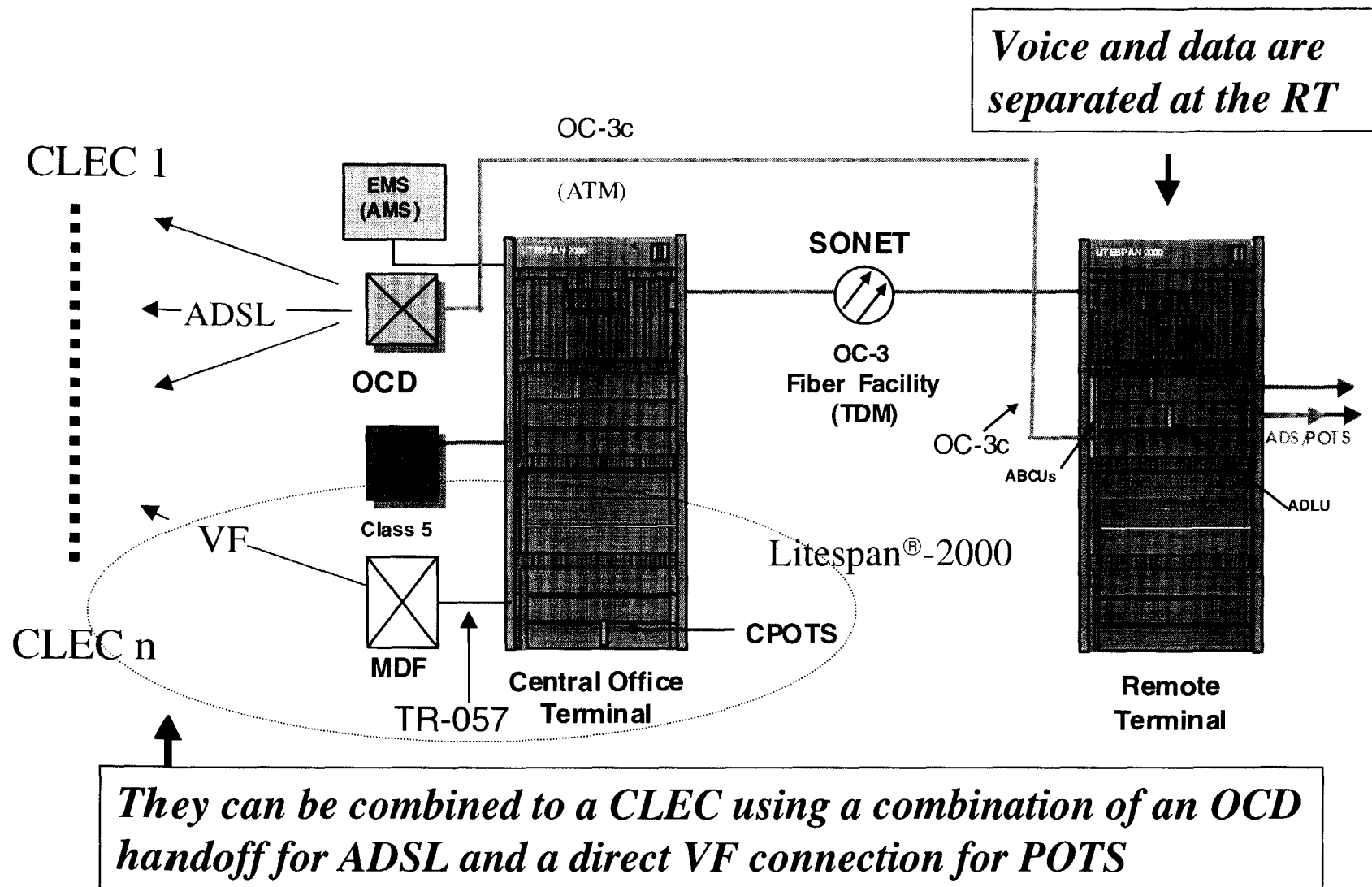
- Maximum of 3 OC-03s
- Displaces available DS3s
- Consumes 1/4 OC-12 capacity

# Multi-Provider Interconnection

*There is only one OC-3c interface for each ABCU chain*



# Combining Voice & Data



# **Future Litespan<sup>®</sup> Development**

**Note: These are Litespan features planned by Alcatel USA.  
Deployment depends upon customer tests and acceptance, as  
well as actual installation plans.**



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▼ **Broadening DSL Services**

- ◆ Quad Combo (ADSL & POTS) ADLU
- ◆ HDSL2 (TDM)
- ◆ G.Lite Mode (w/o Fast Retrain)- Quad ADLU only
- ◆ Quad G.SHDSL\*

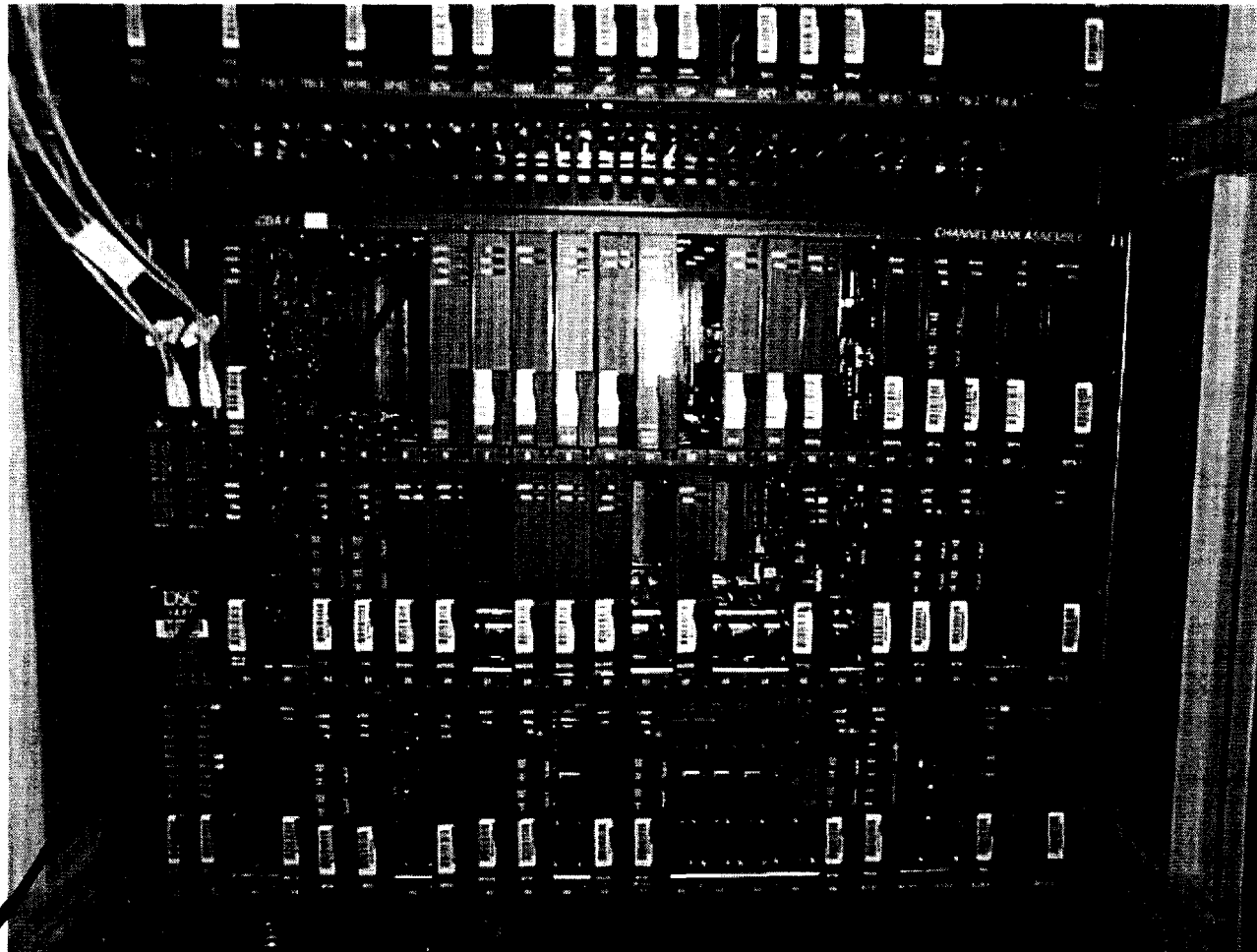
▼ **Greater ATM functionality**

- ◆ Provisionable VP/VC Cross-Connects
  - ◆ Eliminates fixed mapping
  - ◆ More than one VP per CBA (OC-03 bandwidth limitation still applies)
  - ◆ Much more efficient utilization of OCD bandwidth

\* New Features since July User's Group

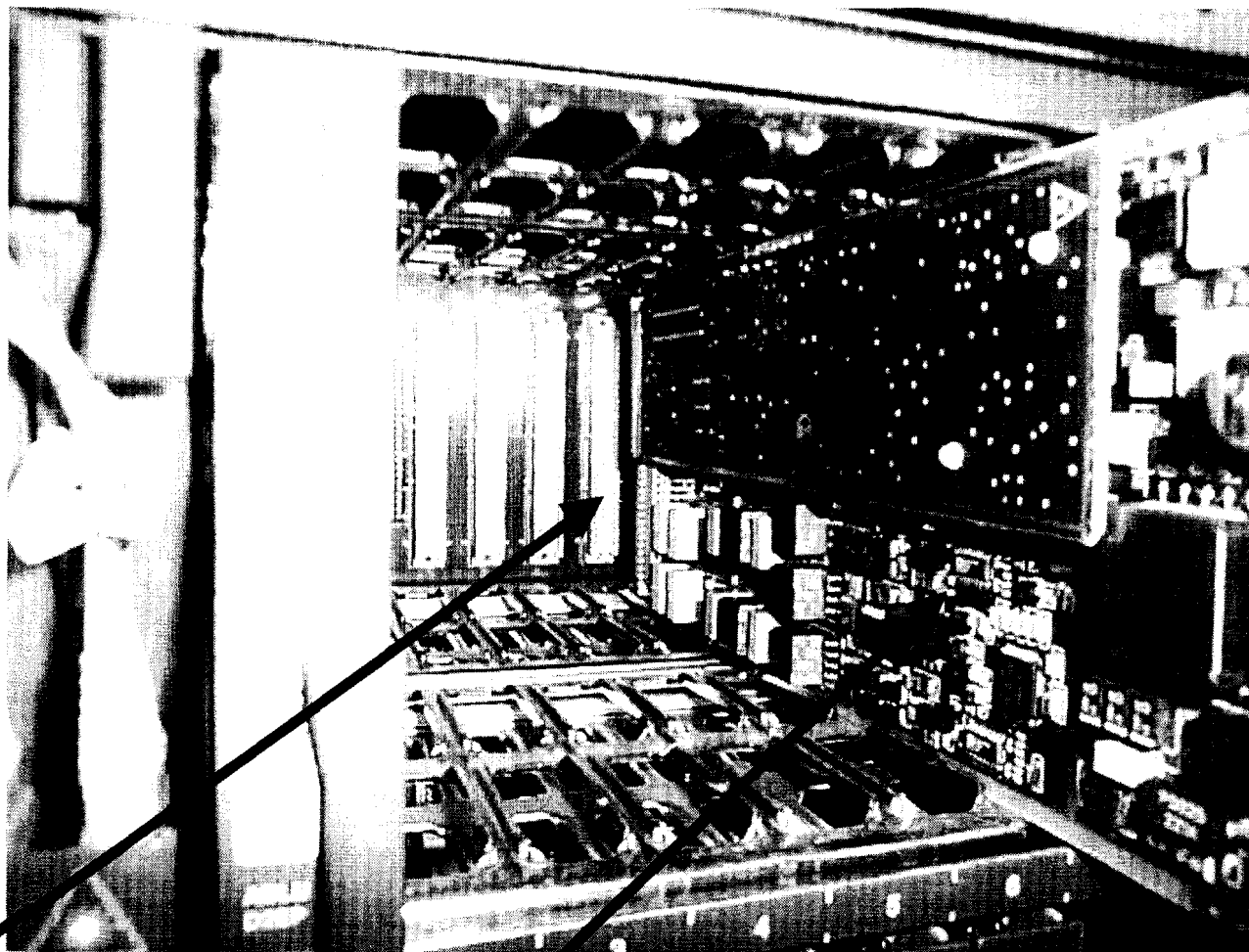
- ▼ **Only Litespan® cards can be installed in Litespan®**
  - ◆ Proprietary shelf, backplane and software
  - ◆ Software is copyright protected, issued under restricted license
  - ◆ Contracts and warranties prohibit foreign equipment
- ▼ **Cannot support proprietary cards/interfaces (*i.e.*,SDSL)**
  - ◆ Backplane and bus limitations
  - ◆ Software and resource restraints
  - ◆ Will support standard interfaces (G.SHDSL)
- ▼ **Installing card does not deliver service**
  - ◆ No direct, physical access to cards (only interfaces)
  - ◆ Service turn-up depends on software provisioning





## Dual ADLU Card in a Litespan Channel Bank

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Electrical connection

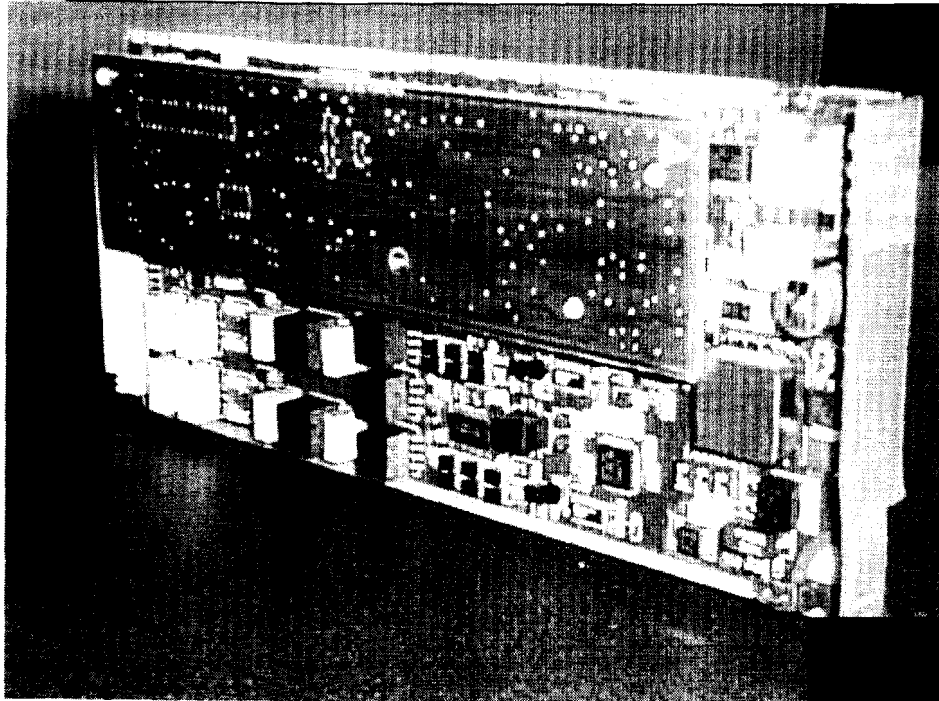
ADLU card being inserted into a channel bank

Confidential information, subject to change.

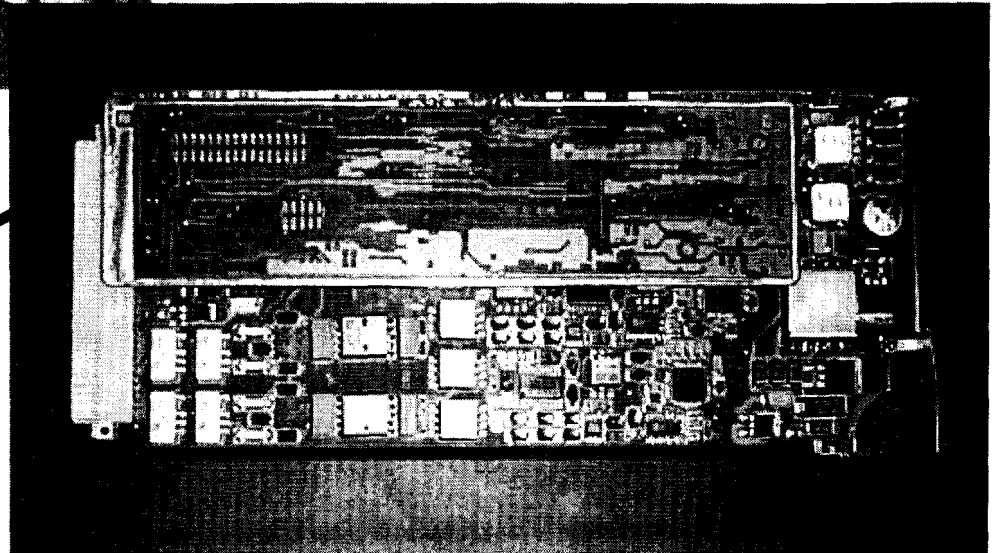
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## ADLU card

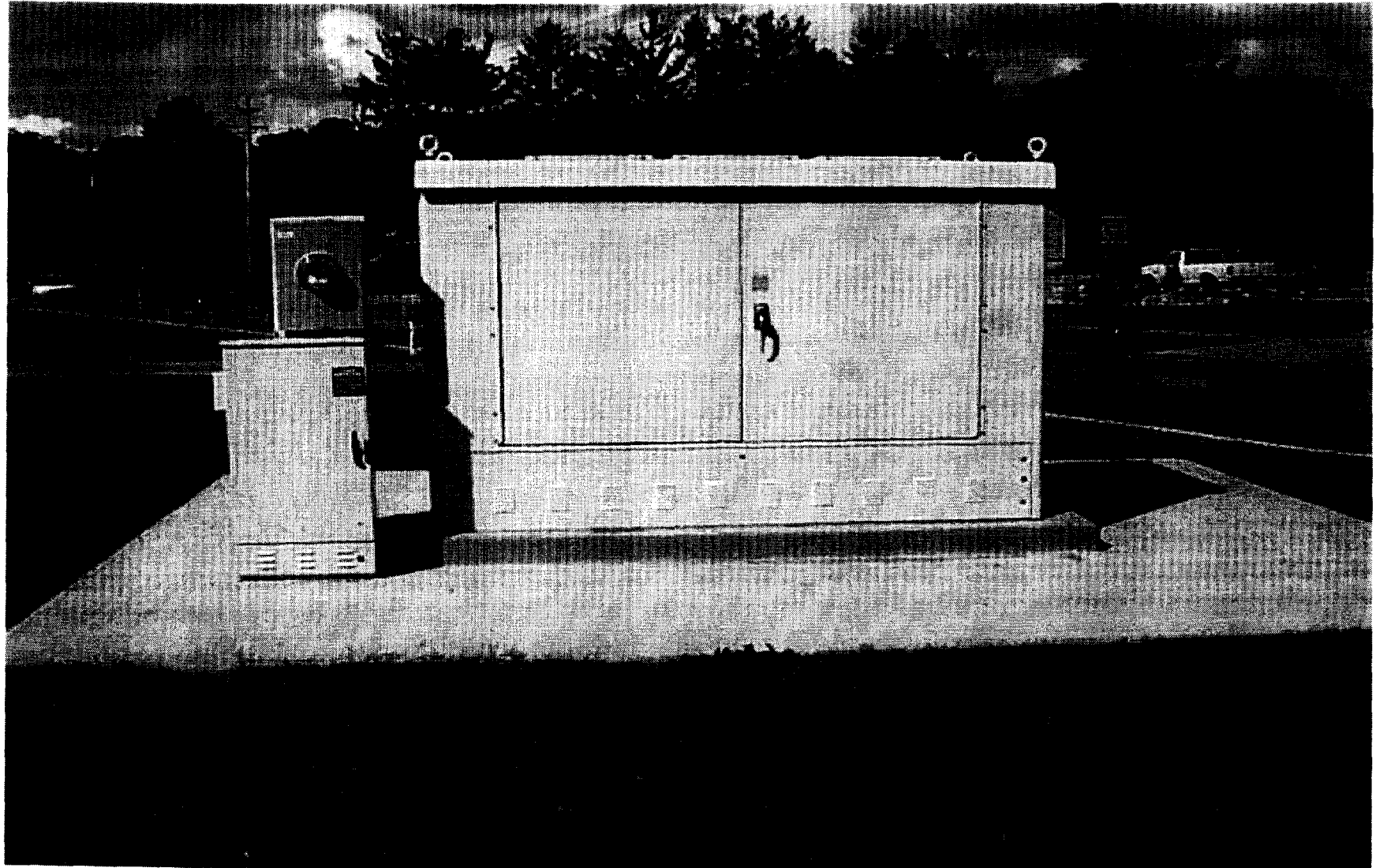


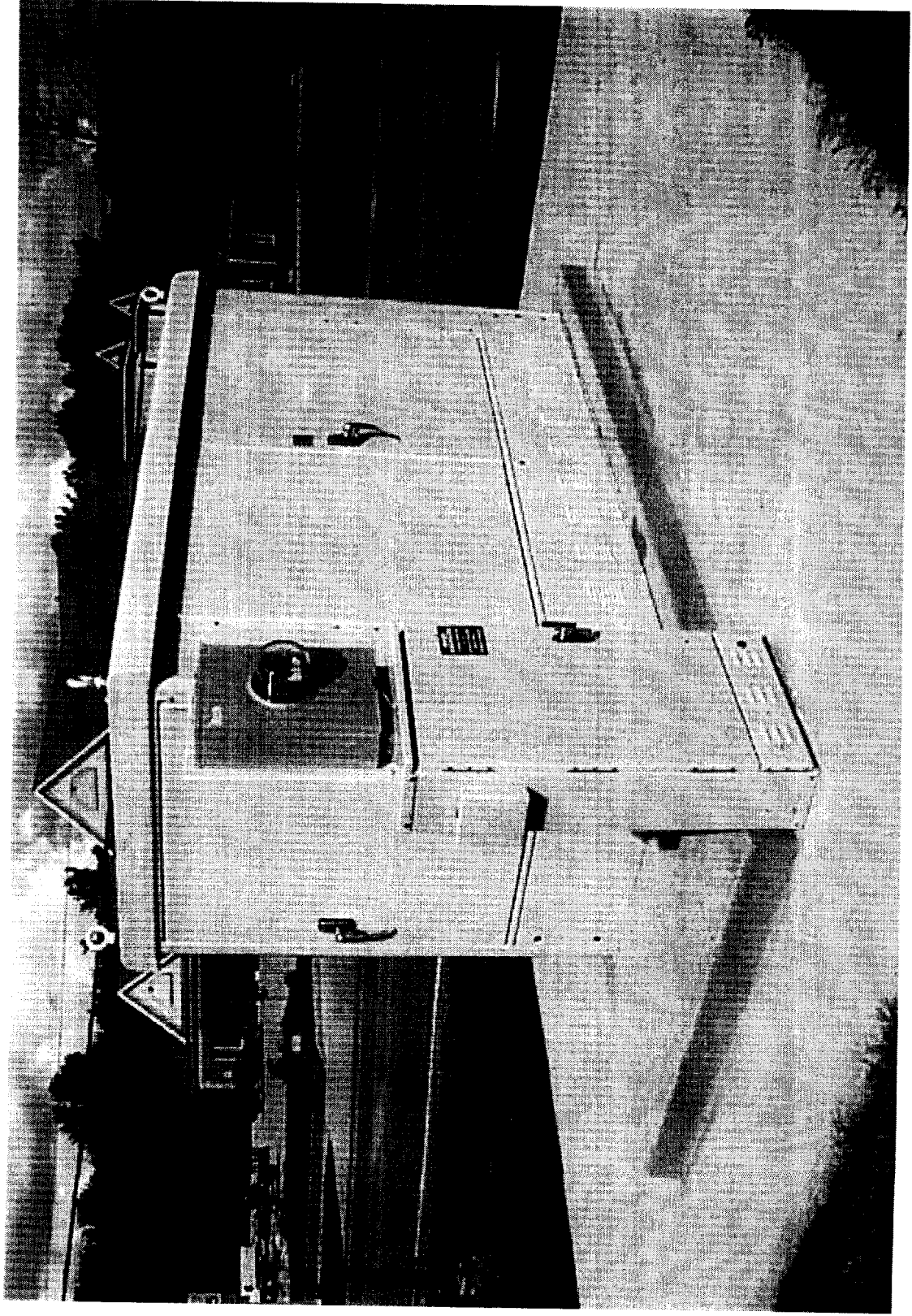
Electrical connection

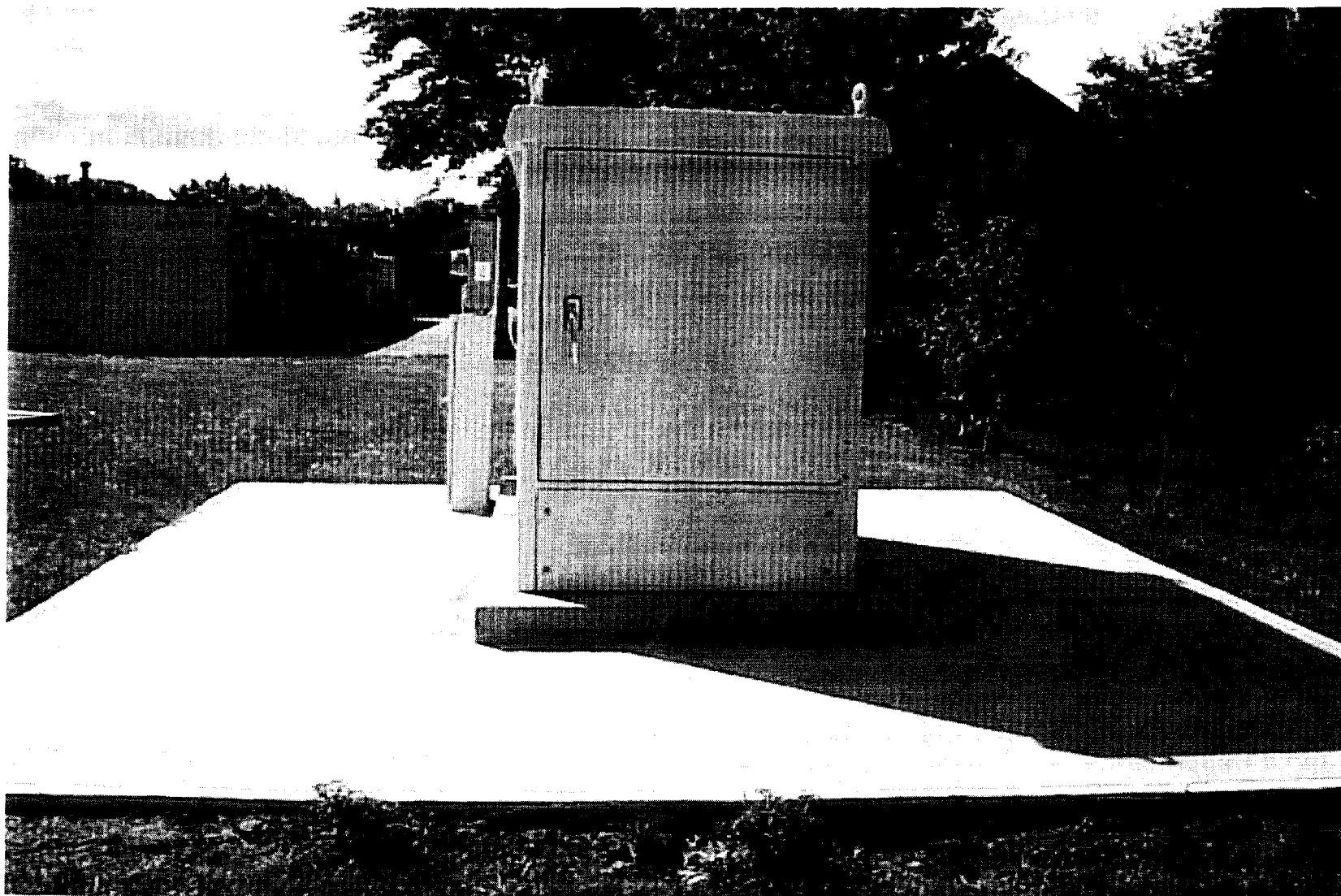


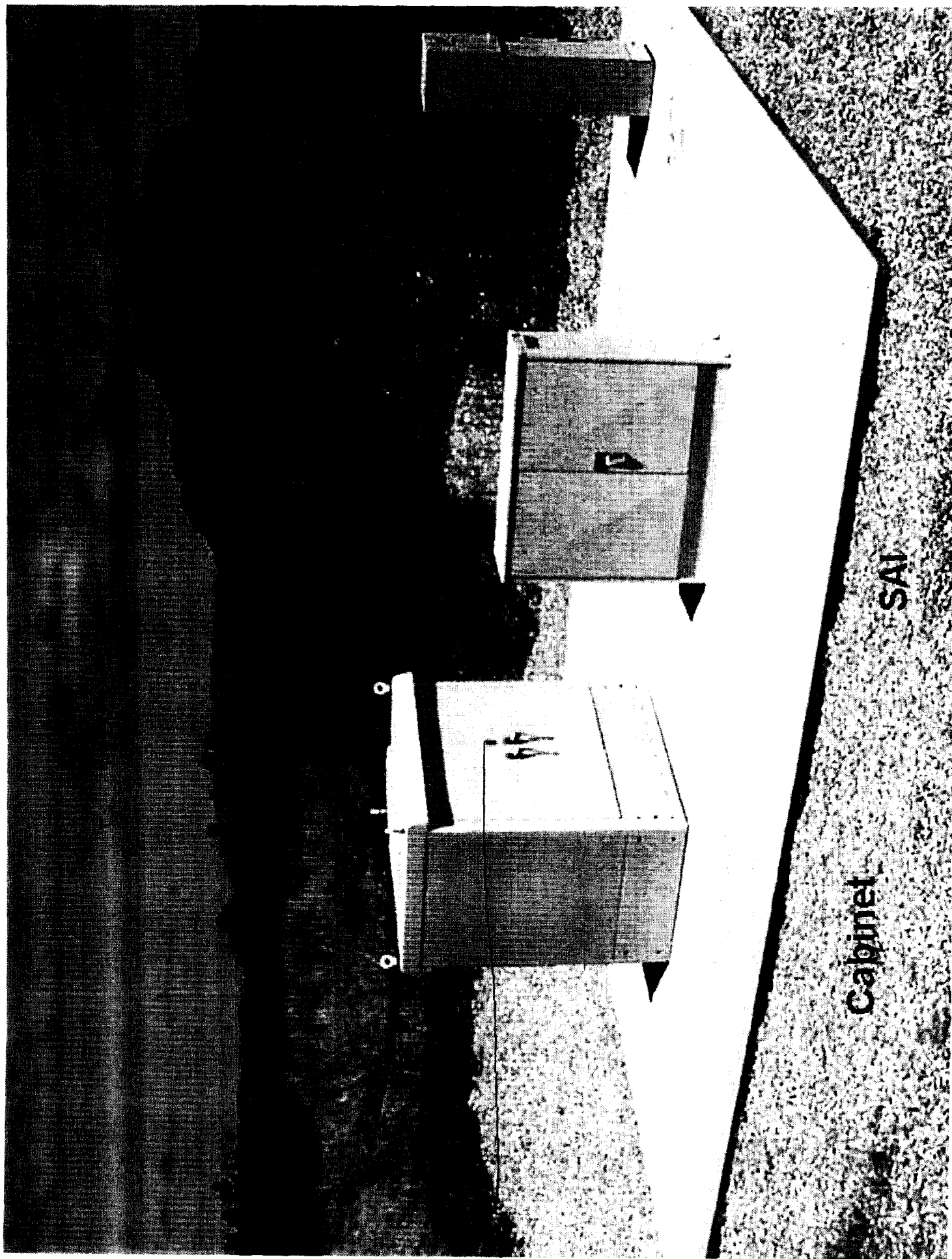
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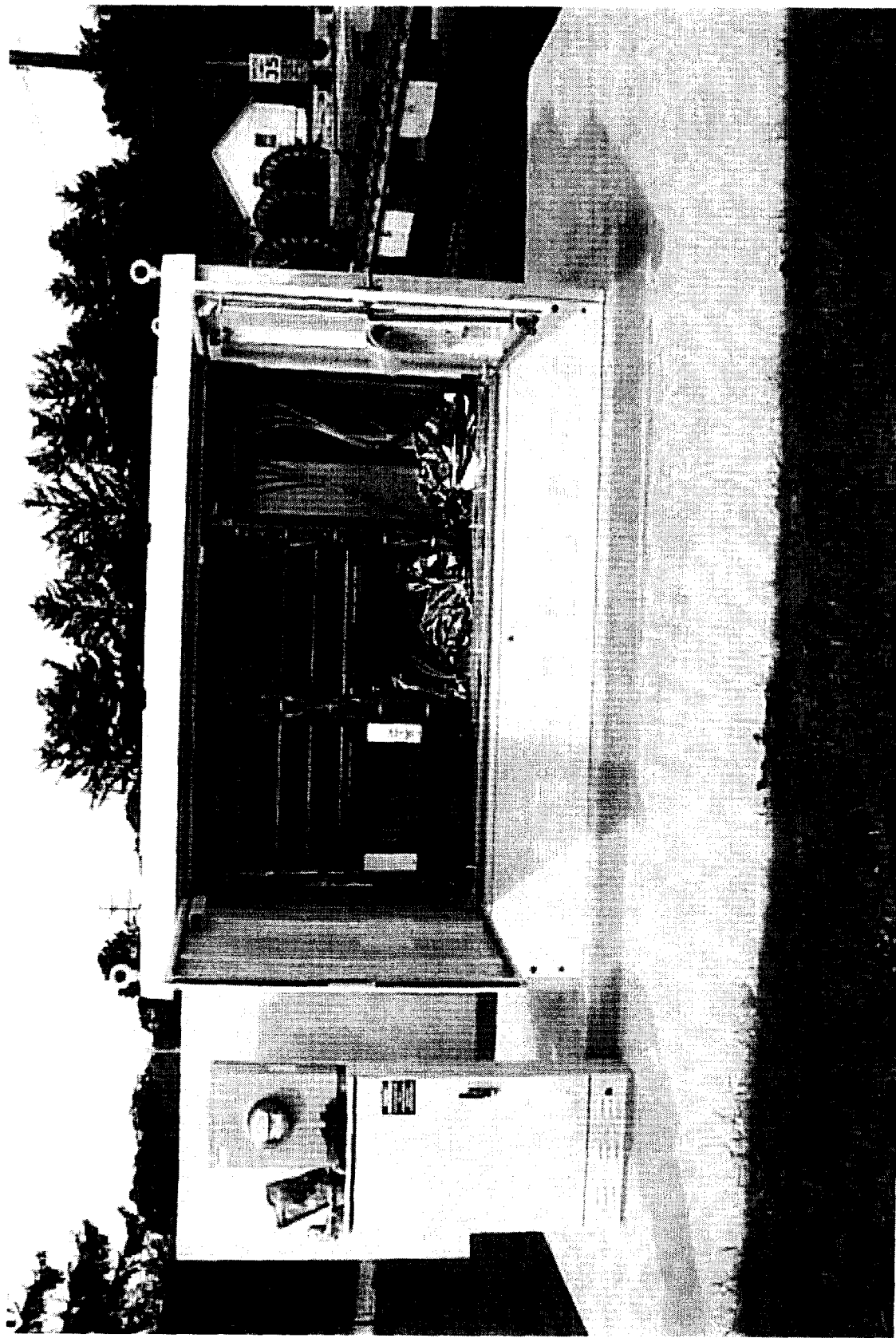




Cabinet

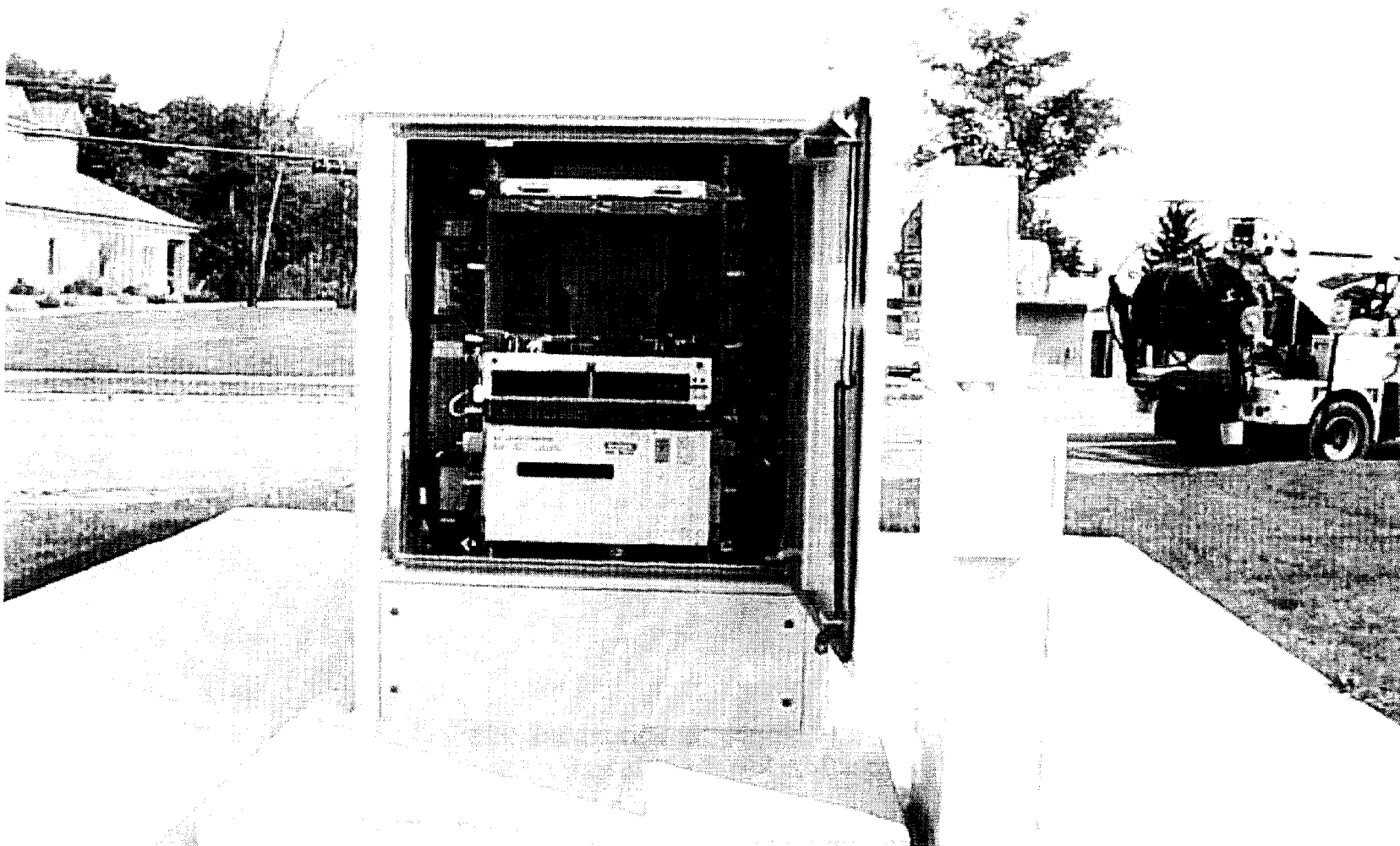
SAI

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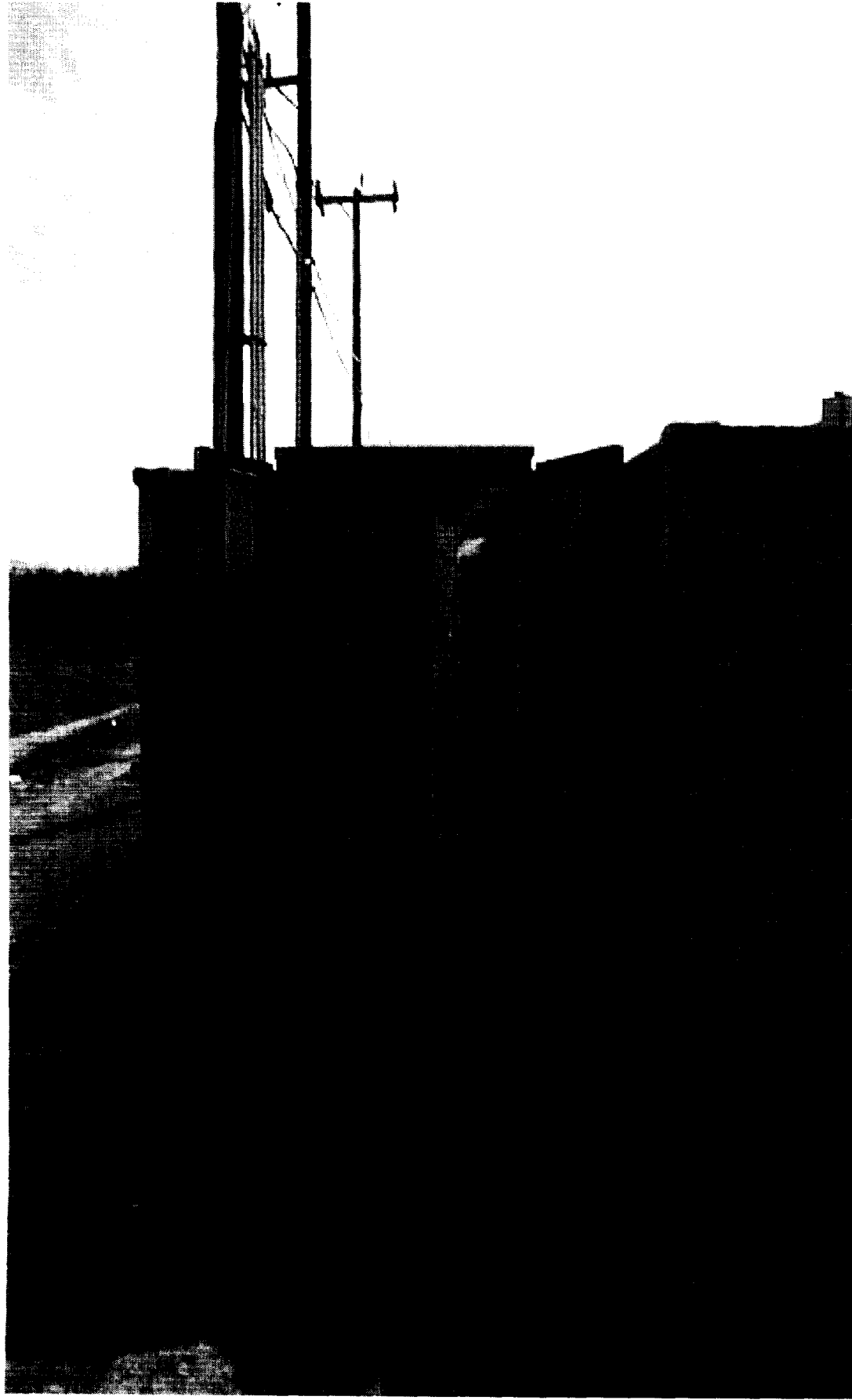
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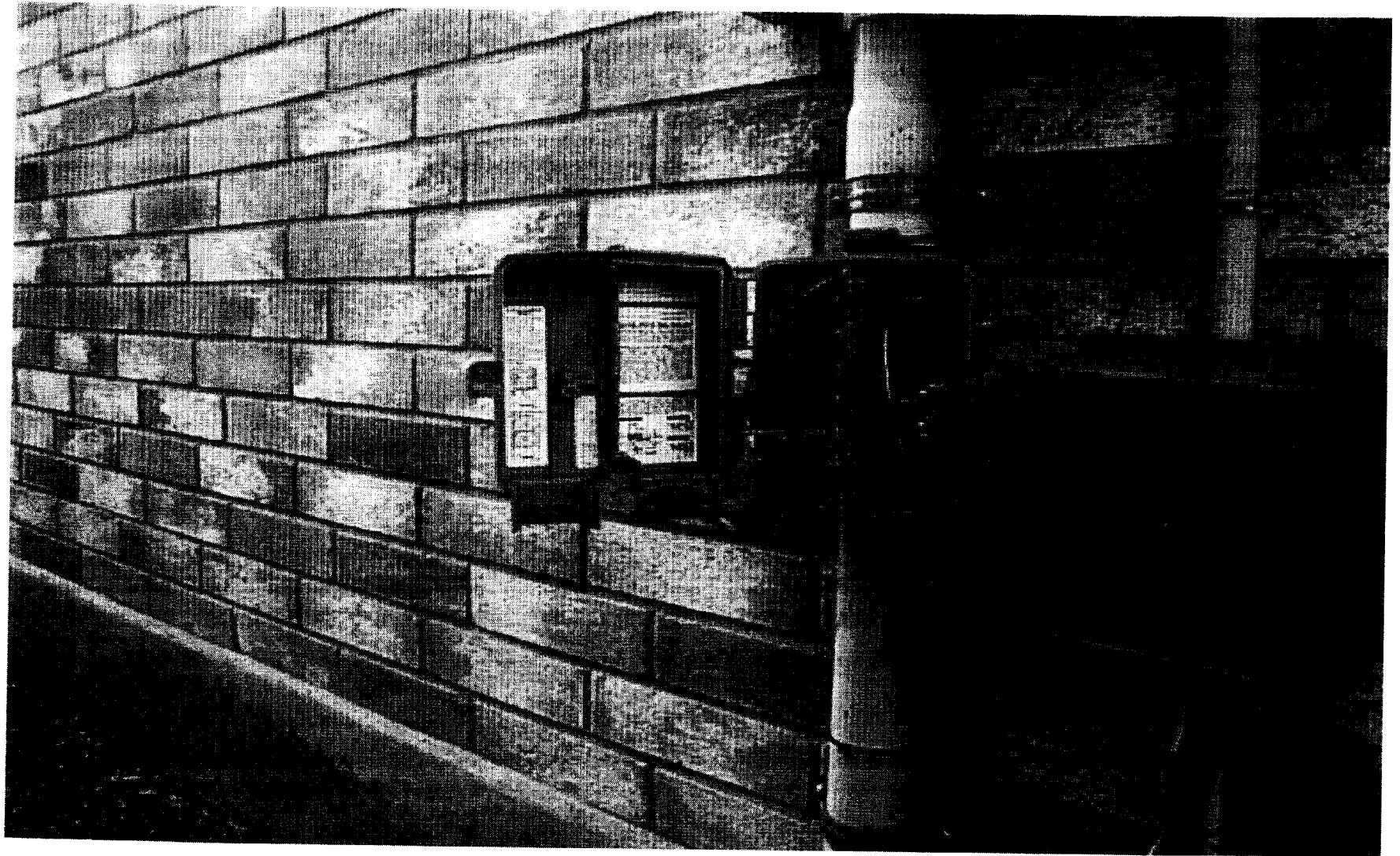


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# Any other questions?



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